REMARKS

Claims 1-12, 14 and 16-22 are pending in this application. Claims 13 and 15 have been cancelled without prejudice. Claims 1-12 and 14 have been amended and new claims 16-22 have been added; no new matter has been added.

In the specification, lines 16 – 33 on page 4 and lines 10 – 15 on page 5 have been amended to place the application in better form and to correct several typographical errors.

The present invention is a remote feeder reactance coil comprising a primary winding and a secondary winding. The primary winding is connected to a high-frequency signal transmission line. The remote feeder reactance coil also comprises a suppression circuit including a secondary winding and a resistive load.

In operation, one terminal of the primary winding is connected to a high-frequency signal transmission line which also carries the feed current. The other terminal of the primary winding is connected to a low-frequency energy input port of an intermediate amplifier and also, via a capacitor for electronic shock hazard protection, to circuit ground. As may be learned from Figure 1 of the present disclosure, the energy required to operate the intermediate amplifier 16 is provided by generating a voltage step over the remote feeder reactance coil. Therefore, one terminal of the remote feeder reactance coil is connected to the signal transmission line and the other terminal of the remote feeder reactance coil is grounded via a

capacitor. A voltage step to be used is only at hand if the potential at the first and second terminals of the remote feeder reactance coil are input into the intermediate amplifier. In view of the fact that it is known to a person skilled in the art that the intermediate amplifier must be connected with both potentials, this has not been described in great detail.

In operation, the secondary winding, together with an ohmic resistor, will generate a resistive load along a section of the primary winding. The resistive load effectively suppresses the formation of parasitic resonances in the useful frequency range without considerably influencing the characteristics of the remote feeder reactance coil in high-frequency applications.

In a first embodiment (as recited in amended claim 1), the suppression circuit introduces the resistive load along a section of the primary winding, and the resistive load suppresses parasitic resonance frequencies without considerably influencing the characteristics of the remote feeder reactance coil for high-frequency applications.

In a second embodiment (as recited in new claim 16), individual turns of the primary winding maintain direct and close contact to each other in a first and second area of the coil, and are spaced from each other in a third area which extends between the first and second areas.

In the Office Action dated June 18, 2003, claims 1, 6, 8, 11 and 13 have been rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 4,961,049 to Ghislanzoni (hereinafter "Ghislanzoni"). Claims 2-5, 7, 9, 10 and 14 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Ghislanzoni in view of U.S. Patent No. 4,806,834 to Koenig (hereinafter "Koenig"). This rejection is respectfully traversed.

Neither the teachings of Ghislanzoni or Koenig, taken separately or combined, would lead a person skilled in the art to arrive at the first or second embodiments of the remote feeder reactance coil of the present application as recited in the amended and new claims.

Ghislanzoni discloses a current measuring device using magnetic coupling. Ghislanzoni does not teach or suggest a remote feeder reactance coil for supplying energy to, or withdrawing energy from, a high-frequency signal transmission line via first and second terminals. A person skilled in the art of transmission lines would not regard a measuring apparatus as being relevant to an improved remote feeder reactance coil.

Furthermore, Ghislanzoni fails to disclose a suppression circuit configured in accordance of either of the two embodiments described above. A measuring apparatus such as that disclosed by Ghislanzoni would have no influence on the system wherein the measurement is performed.

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Koenig discloses an electric circuit for inductance conductors, transformers and motors wherein two coils of electrically conductive wire are coiled about a bar of magnetizable material. Koenig does not teach or suggest a remote feeder reactance coil for supplying energy to, or withdrawing energy from, a high-frequency signal transmission line. Furthermore, Koenig fails to disclose a suppression circuit configured in accordance of either of the two embodiments described above.

Claims 1 and 16 of the present application are distinguishable over Ghislanzoni alone or in combination with Koenig. Since claims 2-12 and 14 depend from claim 1, and claims 17-20 depend from claim 16, they are also distinguishable over Ghislanzoni alone or in combination with Koenig.

It is respectfully submitted that the amendments and remarks made herein place pending claims 1-12, 14 and 16-22 in condition for allowance. Accordingly, entry of this amendment as well as reconsideration and allowance of pending claims 1-12, 14 and 16-22 are respectfully requested.

If the Examiner does not believe that the claims are in condition for allowance, the Examiner is respectfully requested to contact the undersigned at 215-568-6400.

Respectfully submitted,

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By____________________________

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